

What is Claimed is:

1. A binocular vibration correcting device comprising: a left and right pair of vibration-correcting optical systems that corrects left and right image vibrations by being driven in the yaw direction and the pitch direction in accordance with vibration;

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a pair of optical system holding members that hold said left and right vibration-correcting optical systems respectively;

an intermediate supporting member that supports said pair of optical system holding members so as to be able to rotate in the yaw direction and is also supported by a main body member of said binocular vibration correcting device so as to be able to rotate in the pitch direction;

connecting member that connects said pair of optical system holding members so as to be able to rotate in the yaw direction at a position away from the yaw direction rotate axes of said pair of optical system holding members in the direction of the optical axes;

a yaw direction drive unit that drives said connecting member in the yaw direction; and

a pitch direction drive unit that drives said intermediate supporting member in the pitch direction.

2. The binocular vibration correcting device according to

Claim 1; wherein

said left and right vibration-correcting optical systems are respectively comprised of a single or multiple optical components.

3. The binocular vibration correcting device according to Claim 1; wherein

the yaw direction rotate axes of said optical system holding members are distanced from said vibration-correcting optical systems in the direction of the optical axes.

4. The binocular vibration correcting device according to Claim 1; wherein

said intermediate supporting member, said pair of optical system holding members, and said connecting member constitute a parallel link that can operate in the yaw direction.

5. The binocular vibration correcting device according to Claim 1; wherein

said yaw direction rotate axis of said optical system holding member and the pitch direction rotate axis of said intermediate supporting member intersect each other perpendicularly in a same plane.

6. The binocular vibration correcting device according to Claim 1 further comprising:

a vibration detector that detects vibrations in the yaw direction and the pitch direction;

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a position detector that detect a position of said connecting member in the yaw direction and a position of said intermediate support member in the pitch direction; and

a controller that controls said yaw direction drive unit and said pitch direction drive unit based on output signals from said vibration detector and said position detector.

7. The binocular vibration correcting device according to Claim 1 or 6; wherein

said yaw direction rotate axis of said optical system holding member and said pitch direction rotate axis of said intermediate supporting member intersect each other perpendicularly within a same plane, and

said vibration-correcting optical system is disposed on the opposite side of at least one of said yaw direction drive unit and said pitch direction drive unit across said plane.

8. A binocular optical instrument with a binocular vibration correcting device comprising:

a left and right pair of vibration correcting optical systems that corrects left and right image vibration by being driven vibration in the yaw and pitch directions in accordance with

a pair of optical system holding members that hold said left and right vibration correcting optical systems

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respectively;

an intermediate supporting member that supports said pair of optical holding members so as to be able to rotate in the yaw direction and is also supported by a main body member of said binocular vibration correcting device so as to be able to rotate in the pitch direction;

a connecting member that connects said pair of optical system holding members so as to be able to rotate in the yaw direction at a position away from the yaw direction rotate axes of said pair of optical system holding members in the direction of the optical axes;

a yaw direction drive unit that drives said connecting member in the yaw direction; and

a pitch direction drive unit that drives said intermediate supporting member in the pitch direction.

9. A binocular optical instrument with a binocular vibration correcting device comprising:

a left and right pair of vibration-correcting optical systems that corrects left and right image vibration by being driven vibration in the yaw and pitch directions in accordance with

a pair of optical system holding members that hold said left and right vibration correcting optical systems respectively;

an intermediate supporting member that supports said

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pair of optical holding members so as to be able to rotate in the yaw direction and is also supported by a main body member of said binocular vibration correcting device so as to be able to rotate in the pitch direction;

a connecting member that connects said pair of optical system holding members so as to be able to rotate in the yaw direction at a position away from the yaw direction rotate axes of said pair of optical system holding members in the direction of the optical axes;

a yaw direction drive unit that drives said connecting member in the yaw direction;

a pitch direction drive unit that drives said intermediate supporting member in the pitch direction;

a vibration detector that detects vibrations in the yaw direction and the pitch direction;

a position detector that detects a position of said connecting members in the yaw direction and a position of said intermediate support member in the pitch direction; and

a controller that controls said yaw direction drive unit and said pitch direction drive unit based on output signals from said vibration detector and said position detector.

10. The binocular optical instrument according to Claim 8 or 9; wherein

said binocular optical instrument has a left and right

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pair of objective optical lens; and

said vibration-correcting optical systems are included in said left and right pair of objective optical systems, respectively,

said binocular optical instrument allows object observation through said pair of objective optical systems and a left and right pair of ocular optical systems.

11. The binocular optical instrument according to Claim 8 or 9; wherein

said vibration-correcting optical systems are included, respectively, in said left and right pair of objective optical systems that constitute a stereoscopic shooting optical system,

said binocular optical instrument allows stereoscopic shooting through said stereoscopic shooting optical system.

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